Jean-Jacques Rousseau

ESSAY
on the
ORIGIN OF LANGUAGES
which treats of
MELODY AND MUSICAL IMITATION

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CHAPTER ONE

On the Various Means of Communicating Our Thoughts

Speech distinguishes man among the animals; language distinguishes nations from each other; one does not know where a man comes from until he has spoken. Out of usage and necessity, each learns the language of his own country. But what determines that this language is that of his country and not of another? In order to tell, it is necessary to go back to some principle that belongs to the locality itself and antedates its customs, for speech, being the first social institution, owes its form to natural causes alone.

As soon as one man was recognized by another as a sentient, thinking being similar to himself, the desire or need to communicate his feelings and thoughts made him seek the means to do so. Such means can be derived only from the senses, the only instruments through which one man can act upon another. Hence the institution of sensate signs for the expression of thought. The inventors of language did not proceed rationally in this way; rather their instinct suggested the consequence to them.

Generally, the means by which we can act on the senses of others are restricted to two: that is, movement and voice. The action of movement is immediate through touching, or mediate through gesture. The first can function only within arm's length, while the other extends as far as the visual ray. Thus vision and hearing are the only passive organs of language among distinct individuals.

Although the language of gesture and spoken language are equally natural, still the first is easier and depends less upon conventions. For more things affect our eyes than our ears. Also, visual forms are more varied than sounds, and more expressive, saying more in less time. Love, it is said, was the inventor of drawing. It might also have invented speech, though less happily. Not being very well pleased with it, it disdains it; it has livelier ways of expressing itself. How she could say things to her beloved, who traced his shadow with such pleasure! What sounds might she use to work such magic?

Our gestures merely indicate our natural unrest. It is not of those that I wish to speak. Only Europeans gesticulate when speaking; one might say that all their power of speech is in their arms. Their lungs are powerful too, but to nearly no avail. Where a Frenchman would strain and torture his body, emitting a great verbal torrent, a Turk will momentarily remove his pipe from his mouth to utter a few words softly, crushing one with a single sentence.

Since learning to gesticulate, we have forgotten the art of pantomime, for the same reason that with all our beautiful systems of grammar we no longer understand the symbols of the Egyptians. What the ancients said in the liveliest way, they did not express in words but by means of signs. They did not say it, they showed it.

Consider ancient history; it is full of such ways of appealing to the eye, each of them more effective than all the discourse that might have replaced it. An object held up before speaking will arouse the imagination, excite curiosity, hold the mind in suspense, in expectation of what will be said. I have noticed that Italians and Provençals, among whom gesture ordinarily precedes discourse, use this as a way of drawing attention and of pleasing their listeners. But in the most vigorous language, everything is said symbolically, before one actually speaks. Tarquin, or Thrasybulus lopping off poppies; Alexander applying his seal to the mouth of his favorite; Diogenes promenading in front of Zeno: do they not speak more effectively than with words? What verbal circumlocution would express the same idea as well? Darius, engaged with his army in Scythia, receives from the King of Scythia a frog, a bird, a mouse, and five arrows. The herald makes the presentation in silence and departs. That terrible harangue was understood; and Darius returned to his own country as quickly as he could. Substitute a letter for this sign: the more menacing it is, the less frightening will it be. It will be no more than a boast, which would draw merely a smile from Darius.

When the Levite of Ephraim wanted to avenge the death of his wife, he wrote nothing to the tribes of Israel, but divided her body into twelve sections which he sent to them. At this horrible sight they rushed to arms, crying with one voice: *Never has such a thing happened in Israel, from the time of our fathers' going out of Egypt, down to the present day!* And the tribe of Benjamin was exterminated.[1] In our day, this affair, recounted in court pleadings and discussions, perhaps in jest, would be dragged out until this most horrible of crimes would in the end have remained unpunished. King Saul, returning from the fields, similarly dismembered his plow oxen, thus using a similar sign to make Israel march to the aid of the city of Jabes. The Jewish prophets and the Greek lawgivers, by frequently presenting sensate objects to the people, spoke to them more effectively through these objects than they would have by means of lengthy discourse. The way the Athenaeum yields when the orator Hyperides made them acquit the courtesan Phryne, without alleging a single word in her defense, is another mute eloquence, the effects of which are not unusual in any age.

Thus one speaks more effectively to the eye than to the ear. There is no one who does not feel the truth of Horace's judgment in this regard. Clearly the most eloquent speeches are those containing the most imagery; and sounds are never more forceful than when they produce the effects of colors.

But when it is a question of stirring the heart and inflaming the passions, it is an altogether different matter. The successive impressions of discourse, which strike a redoubled blow, produce a different feeling from that of the continuous presence of the same object, which can be taken in at a single glance. Imagine someone in a painful situation that is fully known; as you watch the afflicted person, you are not likely to weep. But give him time to tell you what he feels and soon you will burst into tears. It is solely in this way that the scenes of a tragedy produce their effect.[2]

Pantomime without discourse will leave you nearly tranquil; discourse without gestures will wring tears from you. The passions have their gestures, but they also have their accents; and these accents, which thrill us, these tones of voice that cannot fail to be heard, penetrate to the very depths of the heart, carrying there the emotions they wring from us, forcing us in spite of ourselves to feel what we hear. We conclude that while visible signs can render a more exact imitation, sounds more effectively arouse interest.

This leads me to think that if the only needs we ever experienced were physical, we should most likely never have been able to speak; we would fully express our meanings by the language of gesture alone. We would have been able to establish societies little different from those we have, or such as would have been better able to achieve their goals. We would have been able to institute laws, to choose leaders, to invent arts, to establish commerce, and to do, in a word, almost as many things as we do with the help of speech. Without fear of jealousy, the secrets of oriental gallantry are passed across the more strictly guarded harems in the epistolary language of salaams.[3] The mutes of great nobles understand each other, and understand everything that is said to them by means of signs, just as well as one can understand anything said in discourse. M. Pereyra and those like him who not only consider that mutes speak, but claim to understand what they are saying, had to learn another language, as complicated as our own, in order to understand them.

Chardin says that in India, traders would take each other by the hand, varying their grip in a way that no one could see, thus transacting all their business publicly yet secretly, without a single word being uttered. If these traders had been blind, deaf, and mute, this would not hinder their understanding of each other; which shows that of the two senses by which we act, one alone will suffice to form a language.

It appears again, by the same observations, that the invention of the art of communicating our ideas depends less upon the organs we use in such communication than it does upon a power proper to man, according to which he uses his organs in this way, and which, if he lacked these, would lead him to use others to the same end. Give man a structure [organically] as crude as you please:

doubtless he will acquire fewer ideas, but if only he has some means of contact with his fellow men, by means of which one can act and another can sense, he will finally succeed in communicating whatever ideas he might have.

Animals have a more than adequate structure for such communication, but none of them has ever made use of it. This seems to me a quite characteristic difference. That those animals which live and work in common, such as beavers, ants, bees, have some natural language for communicating among themselves, I would not question. Still, the speech of beavers and ants is apparently by gesture; i.e., it is only visual. If so, such languages are natural, not acquired. The animals that speak them possess them a-borning: they all have them, and they are everywhere the same. They are entirely unchanging and make not the slightest progress. Conventional language is characteristic of man alone. That is why man makes progress, whether for good or ill, and animals do not. That single distinction would seem to be far-reaching. It is said to be explicable by organic differences. I would be curious to witness this explanation.

CHAPTER TWO

That the First Invention of Speech Is Due Not to Need but Passion

It seems then that need dictated the first gestures, while the passions stimulated the first words. By pursuing the course of the facts with these distinctions we may be able to see the question of the origin of language in an entirely new light. The genesis of oriental languages, the oldest known, absolutely refutes the assumption of a didactic progression in their development. These languages are not at all systematic or rational. They are vital and figurative. The language of the first men is represented to us as the tongues of geometers, but we see that they were the tongues of poets.

And so it had to be. One does not begin by reasoning, but by feeling. It is suggested that men invented speech to express their needs: an opinion which seems to me untenable. The natural effect of the first needs was to separate men, and not to reunite them. It must have been that way, because the species spread out and the earth was promptly populated. Otherwise mankind would have been crammed into a small area of the world, and the rest would have remained uninhabited.

From this alone it follows clearly that the origin of languages is not at all due to people's first needs. It would be absurd to suppose that the means of uniting them derived from the cause of their separation. Whence then this origin? From moral needs, passions. All the passions tend to bring people back together again, but the necessity of seeking a livelihood forces them apart. It is neither hunger nor thirst but love, hatred, pity, anger, which drew from them the first words. Fruit does not disappear from our hands. One can take nourishment without speaking. One stalks in silence the prey on which one would feast. But for moving a young heart, or repelling an unjust aggressor, nature dictates accents, cries, lamentations. There we have the invention of the most ancient words; and that is why the first languages were singable and passionate before they became simple and methodical. All of this is not true without qualification, but I shall return to it in the sequel.

CHAPTER THREE

That the First Language Had To Be Figurative

As man's first motives for speaking were of the passions, his first expressions were tropes. Figurative language was the first to be born. Proper meaning was discovered last. One calls things by their true name only when one sees them in their true form. At first only poetry was spoken; there was no hint of reasoning until much later.

However, I feel the reader stopping me at this point to ask how an expression can be figurative before it has a proper meaning, since the figure consists only of a transference of meaning. I agree with that. But, in order to understand what I mean, it is necessary to substitute the idea that the passion presents to us for the word that we transpose. For one does not only transpose words; one also transposes ideas. Otherwise figurative language would signify nothing. I shall reply then with an example.

Upon meeting others, a savage man will initially be frightened. Because of his fear he sees the others as bigger and stronger than himself. He calls them *giants.* After many experiences, he recognizes that these so-called giants are neither bigger nor stronger than he. Their stature does not approach the idea he had initially attached to the word giant. So he invents another name common to them and to him, such as the name *man*, for example, and leaves *giant* to the fictitious object that had impressed him during his illusion. That is how the figurative word is born before the literal word, when our gaze is held in passionate fascination; and how it is that the first idea it conveys to us is not that of the truth.

What I have said of words and names presents no difficulty relative to the forms of phrases. The illusory image presented by passion is the first to appear, and the language that corresponded to it was also the first invented. It subsequently became metaphorical when the enlightened spirit, recognizing its first error, used the expressions only with those passions that had produced them.

CHAPTER FOUR

On the Distinctive Characteristics of the First Language and the Changes It Had To Undergo

Simple sounds emerge naturally from the throat; and the mouth is naturally more or less open. But the modifications of the tongue and palate, which produce articulation, require attention and practice. One does not make them at all without willing to make them. All children need to learn them, and some do not succeed easily. In all tongues, the liveliest exclamations are inarticulate. Cries and groans are simple sounds. Mutes, which is to say the deaf, can make only inarticulate sounds. Father Lamy thinks that if God had not taught men to speak, they would never have learned by themselves. There are only a small number of articulations; there are infinitely many sounds, and the accents that distinguish them can be equally numerous. All the musical notes are just so many accents. True, we have only three or four in speech. The Chinese have many more; but on the other hand, they have fewer consonants. To these possible combinations, add those of tense and number, and you have not only more words, but more distinct syllables than even the richest tongue requires.

I do not doubt that independent of vocabulary and syntax, the first tongue, if it still existed, would retain the original characteristics that would distinguish it from all others. Not only would all the forms of this tongue have to be in images, feelings, and figures, but even in its mechanical part it would have to correspond to its initial object, presenting to the senses as well as to the understanding the almost inevitable impression of the feeling that it seeks to communicate.

Since natural sounds are inarticulate, words have few articulations. Interposing some consonants to fill the gaps between vowels would suffice to make them fluid and easy to pronounce. On the other hand, the sounds would be very varied, and the diversity of accents for each sound would further multiply them. Quantity and rhythm would account for still further combinations. Since sounds, accents, and number, which are natural, would leave little to articulation, which is conventional, it would be sung rather than spoken. Most of the root words would be imitative sounds or accents of passion, or effects of sense objects. It would contain many onomatopoeic expressions.

This language would have many synonyms for expressing the same thing according to various relationships.[1] It would have few adverbs and abstract names for expressing these same relationships. It would have many augmentatives, diminutives, composite words, expletive particles to indicate the cadence of sentences and fullness of phrases. It would have many irregularities and anomalies. It would deemphasize grammatical analogy for euphony, number, harmony, and beauty of sounds. Instead of arguments, it would have aphorisms. It would persuade without convincing, and would represent without reasoning. It would resemble Chinese in certain respects, Greek and Arabic in others. If you understand these ideas in all their ramifications, you will find that Plato's *Cratylus* is not as ridiculous as it appears to be.[*1]

CHAPTER FIVE

On Script

Anyone who studies the history and progress of the tongues will see that the more the words become monotonous, the more the consonants multiply; that, as accents fall into disuse and quantities are neutralized, they are replaced by grammatical combinations and new articulations. But only the pressure of time brings these changes about. To the degree that needs multiply, that affairs become complicated, that light is shed, language changes its character. It becomes more regular and less passionate. It substitutes ideas for feelings. It no longer speaks to the heart but to reason. Similarly, accent diminishes, articulation increases. Language becomes more exact and clearer, but more prolix, duller and colder. This progression seems to me entirely natural.

Another way of comparing languages and determining their relative antiquity is to consider their script, and reason inversely from the degree of perfection of this art. The cruder the writing, the more ancient the language. The primitive way of writing was not to represent sounds, but objects themselves whether directly, as with the Mexicans, or by allegorical imagery, or as the Egyptians did in still other ways. This stage corresponds to passionate language, and already supposes some society and some needs to which the passions have given birth.

The second way is to represent words and propositions by conventional characters. That can be done only when the language is completely formed and an entire people is united by common laws; for this already presupposes a twofold convention. Such is the writing of Chinese; it truly represents sounds and speaks to the eyes.

The third is to break down the speaking voice into a given number of elementary parts, either vocal or articulate, with which one can form all the words and syllables imaginable. This way of writing, which is ours, must have been invented by commercial peoples who, in traveling to various countries, had to speak various languages, which would have impelled them to invent characters that could be common to all of them. This is not exactly to represent speech, but to analyze it.

These three ways of writing correspond almost exactly to three different stages according to which one can consider men gathered into a nation. The depicting of objects is appropriate to a savage people; signs of words and of propositions, to a barbaric people, and the alphabet to civilized peoples [*peuples policés*]. One need not think that this latter device is proof of the great antiquity of the people who invented it. On the contrary, those who invented it probably did so in order to facilitate communication with other people who spoke other languages as old as their own, if not older. The same cannot be said of the two other methods. I grant, however, that if one sticks to history and to known facts, alphabetical writing appears to go back as far as any other. But it is not surprising that we have no record of times when there was no writing.

It is not very likely that the first people to resolve language into elementary signs made very exact divisions initially. When it later became clear to them that their analysis was insufficient, some, such as the Greeks, made additions to their alphabet. Others were content to vary the meaning or the sound of an expression by various combinations and positions. The inscriptions on the ruins of Tchelminar, which Chardin has deciphered for us, appear to have been written in that way. There are only two distinct figures or characters,[1] but of varied sizes and placed in various positions, for various meanings. This unknown language of almost startling antiquity is, nonetheless, well formed, judging from the perfection of the arts as indicated in the beauty of the characters[2] and the admirable monuments on which these inscriptions were found. I do not know why there is so little discussion about these amazing ruins. When I read Chardin's description of them, I am as it were transported to another world. It all seems to me intensely thought-provoking.

The art of writing does not at all depend upon that of speaking. It derives from needs of a different kind which develop earlier or later according to circumstances entirely independent of the duration of the people, and which might never have occurred in very old nations. Who knows how long the Egyptians had no other system of writing than hieroglyphics. That such a system is sufficient for a civilized people is proved by the example of the Mexicans, whose system is even less practical.

In comparing the Coptic alphabet to the Syrian or Phoenician, it can easily be seen that the one derives from the other. And it would not be surprising that the latter was the original, nor that the more modern people has taught the more ancient in this way. It is also clear that the Greek alphabet derives from the Phoenician, and is indebted to it. Whether Cadmus or someone else brought it from Phoenicia, it seems certain that the Greeks did not seek it out, but that the Phoenicians themselves brought it to them. For they are the first and almost the only[3] people of Asia or Africa who originated in Europe, and they came to the Greeks much earlier than the Greeks went to them: which does not necessarily prove that the Greeks were not as ancient as the people of Phoenicia.

At first they adopted not only the characters of the Phoenicians, but also the direction of their lines from right to left. Later it occurred to them to proceed as the plowman, that is, writing alternately from left to right and right to left.[4] Finally, they wrote according to our present practice of starting each line from left to right. This development is quite natural. Writing in the furrow fashion is undoubtedly the most comfortable to read. I am even surprised that it did not become the established practice with printing; but, being difficult to write manually, it had to be abandoned as manuscripts multiplied.

But though the Greek alphabet derives from the Phoenician, it does not follow at all that the Greek language derives from the Phoenician. One of these propositions has no dependence upon the other; and it seems the Greek language was already quite ancient at a time when the art of writing was still very primitive in Greece. Until the siege of Troy, the Greek alphabet had at most sixteen letters. There is a tradition that Palamedes added four, and Simonides the other four, all within a short time. On the other hand, Latin, a more modern language, had a complete alphabet almost from the beginning. But the early Romans made scant use of it, since they began so late to record their history, and would merely mark off the lustrums with nail heads.

Besides, there is no absolutely determinate number of letters, or elements of speech. The number may vary according to the language, and according to the various modifications of voice, and consonants. Those who recognize only five vowels are quite deceived: the Greeks had seven written vowels, the first Romans had six.[5] The gentlemen of Port-Royal count ten, M. Duclos, seventeen. And I do not doubt that many more could be distinguished, if custom had made the ear more sensitive and the mouth more practiced in the various modifications of which they are capable. Depending on the refinement of the voice, there will be a greater or a lesser difference between the acute *a* and the grave *o*, between the *i* and the open *e*, etc. Anyone can check this by making the transition from one vowel sound to another, through the continuous intermediate shadings; for one can stop at any point, more or less fixing upon a given nuance, and mark it with a particular character, according as the force of habit makes it more or less perceptible. And this habit depends upon the kinds of sounds occurring in the language, according to which the voice develops imperceptibly. Much the same can be said of the articulated letters or consonants. But most countries have not done so. They have adopted each other's alphabets, and represented very dissimilar sounds and articulations by the same characters. Thus, unless one is extremely well versed in a foreign language, one always gives a ridiculous reading of those of its expressions that are spelled the same as expressions in one's own language.

Writing, which would seem to crystallize language, is precisely what alters it. It changes not the words but the spirit, substituting exactitude for expressiveness. Feelings are expressed in speaking, ideas in writing. In writing, one is forced to use all the words according to their conventional meaning. But in speaking, one varies the meanings by varying one's tone of voice, determining them as one pleases.

Being less constrained to clarity, one can be more forceful. And it is not possible for a language that is written, to retain its vitality as long as one that is only spoken. Words [*voix*], not sounds [*sons*], are written. Yet, in an inflected language, these are the sounds, the accents, and all sorts of modulations that are the main source of energy for a language, and that make a given phrase, otherwise quite ordinary, uniquely appropriate. The means used to overcome this weakness tend to make written language rather elaborately prolix; and many books written in discourse will enervate the language.[6]

To say everything as one would write it would be merely to read aloud.

CHAPTER SIX

Whether It Is Likely that Homer Knew How To Write

Whatever we are told about the invention of the Greek alphabet, I believe it is much more modern than it is made out to be. I base this opinion principally on the character of the language. It has often occurred to me in skeptical moments not only that Homer knew how to write, but that he wrote in the manner of his time. I am very sorry if this doubt is formally contradicted by the story of Bellerophon in the *Iliad.*[*1] But since I share with Fr. Harduin the misfortune of being a bit stubborn in my paradoxes, if I were less ignorant I might well try to extend my doubting to this very story, arguing that it had been uncritically interpolated by the compilers of Homer. What is more, there are few traces of the art in the remainder of the *Iliad.* But I venture to suggest that the whole *Odyssey* is just a tissue of inanities and stupidities that would be dissolved by changing a letter or two. Instead, the poem is made reasonable and fairly continuous, by presuming that these heroes did not know how to write. Had the *Iliad* been written, it would have been sung much less. Rhapsodies would have been less in demand, and less numerous. What other poet, besides Tasso of Venice, has been sung so much? Again, Tasso is sung by none other than the Gondoliers, who are not great readers. Again, the diversity of dialects used by Homer is strong presumptive evidence. Dialects tend to be distinguished by oral speech, while writing tends to assimilate and merge them; they all tend imperceptibly to correspond to a common pattern. The more a people read and learn, the more are its dialects obliterated, and finally they remain only as a form of slang among people who read little and do not write at all.

But these two poems are later than the siege of Troy, and it is hardly obvious that the Greeks who made the siege knew how to write, or that the poet who sang of it did not know. For a long time these poems were written only in men’s memories. Somewhat later they were laboriously collected in writing. That was when Greece began to abound in books and written poetry, whereby all the charm of Homer could be experienced by comparison. Other poets had written; Homer alone had sung. And people have always listened in rapture to these songs, even when Europe has been overrun by barbarians who try to judge what they are incapable of experiencing.

CHAPTER SEVEN

On Modern Prosody

We have no idea of a sonorous and harmonious language, spoken as much according to sounds as it is according to words. It is mistaken to think that accent marks can make up for oral intonation. One invents accent signs [accens] only when intonation [l'accent] has already been lost.[1]

Furthermore, we think we have accents in our language, and we have none at all. Our supposed accents are only vowels, or signs of quantity. They do not indicate any distinctions among sounds. Proof of this is the fact that these accents all come about either through differences of tense or through movements of the lips, of the tongue or of the palate, which produce the various tones of voice, and not by changes in the glottis which produce the various sounds. Thus when our circumflex is not used to indicate a simple sound, either it indicates a long syllable or nothing. Now let us see what it would be for the Greeks.

> Denis of Halicarnassus says that the raising of tone indicated by the acute accent and the lowering for the grave would be a fifth. Thus the prosodic accent would also be musical, especially the circumflex, where the voice, having risen by a fifth, drops by another fifth, on the same syllable.[2]

It is clear enough from this and related passages that M. Duclos completely overlooks musical accent in our language, noting only the vocal and prosodic accents. In addition there are orthographic accents, for which there are no corresponding vocal distinctions, either of sounds or of quantity. They sometimes indicate the omission of a letter, as does the circumflex, and sometimes determine the meaning of a monosyllable, as the so-called *accent grave* which distinguishes *où* as an adverb from *ou* as a disjunctive particle, and à taken as an article from *a* taken as a verb. This accent makes only a visual difference in these monosyllables; it does not affect their pronounciation.[3]

Thus the usual French definition of accent does not accord with any of the accents of their language. I am confident, however, that some of their grammarians, having prejudged that accent marks indicate a raising or lowering of the voice, are nonetheless amazed at the resulting paradox. And, ignoring experience, they propose to produce, by movements of the glottis, the very accents that are produced solely by varying the opening of the mouth and the position of the tongue. But what

I want to suggest to them would be confirmed by experience and would incontrovertibly establish my point.

Attune your voice exactly to some musical instrument, and pronounce accordingly all the most variously accented French words you can muster. As there is no question here of oratorical, but only grammatical accent, the sequence of these words need not make sense. As you pronounce the words in this way, observe whether you do not indicate all the accents just as clearly and distinctly without varying the sound as if you pronounced them with the normal variations in tone of voice. But presumably, and I say incontestably, since you expressed all the accents in the same tone, they do not indicate any difference of sounds. I think that is indisputable.

Any language, in which the same words can be set to several different melodies, has no determinate musical accent. If the accent were definite, then the melody would be too. Whenever the tune is arbitrary, accent counts for nothing.

This is more or less true of all modem European languages, including Italian. Considered in itself, the Italian language is no more musical than is French. The difference is merely that the one lends itself to music and the other does not.

All this tends to confirm the principle that literary languages are naturally bound to undergo changes of character, and to lose in power what they gain in clarity; that the more stress on perfecting of grammar and logic, the faster these changes occur. All that is needed for quickly rendering a language cold and monotonous, is to establish academies among the people who speak it.

Derivative languages are marked by a discrepancy between orthography and pronunciation. The older and more original a language is, the less arbitrary its pronunciation, and consequently, the less complicated the signs for indicating that pronunciation. According to M. Duclos, “all the ancient prosodic signs supposed a quite fixed function, not yet bowing to usage.” I would add that they substituted for it. The ancient Hebrews had neither punctuation nor accent marks; they did not even have vowels. When other peoples wanted to take the trouble to speak Hebrew and the Jews to speak other languages, their own lost its accent. It needed punctuation marks, signs to regulate it. And that did much more to retain the meaning of the words than the pronunciation of the language. Jews speaking Hebrew today would not be understood by their ancestors.

To know English one must learn it twice: first, to read it, and second to speak it. If a foreigner looks at a book from which an Englishman is reading aloud, the foreigner will not perceive any connection between what he sees and what he hears the Englishman say. Why is that? Because England has been successively conquered by various peoples and, while their words have always been written in the same way, the way of pronouncing them has often changed. There is a great deal of difference between the signs that determine the meaning of writing and those that govern pronunciation. It would be easy to construct a language consisting solely of consonants, which could be written clearly but not spoken. Algebra has something of such a language. When the orthography of a language is clearer than its pronunciation, this is a sign that it is written more than it is spoken. This may have been true of the scholarly language of the Egyptians; as is the case for us with the dead languages. In those burdened with useless consonants, writing seems to have preceded speech: and who would doubt that such is the case with Polish? If it is, then Polish must be the coldest of all languages.

NOTE

Some scholars propose, against the consensus and against the tired old evidence drawn from all the ancient manuscripts, that the Greeks had known and used what are called accent marks. They base this opinion on the two passages which I am going to transcribe in juxtaposition, so the reader can judge their true meaning. Here is the first, taken from Cicero's *Treatise on the Orator*, Bk. III, No. 44:

"Hanc diligentiam subsequitur modus etiam et forma verborum, quod jam vereor ne hic Catulo videatur esse puerile. Versus enim veteres illi in hac soluta oratione propemodum, hoc est, numeros quosdam nobis esse adhibendos putaverunt. Interspirationis enim non defatigationis nostrae, neque librariorum notis, sed verborum et sententiarum modo, interpunctas clausulas in orationibus esse voluerunt; idque princeps Isocrates instituisse fertur, ut inconditam antiquorumdicendi consuetudinem, delectationis atque aurium causa (quem admodum scribit discipulus ejus Naucrates), numeris adstringeret.

"Namque haec duo musici, qui erant quondam idem poetae, machinati ad voluptatem sunt, versum atque cantum, eut et verburum numero, et vocum modo, delectatione vincerent aurium satietatem. Haec igitur duo, vocis dico moderationem, et verborum conclusionem, quod orationis severitas pati possit, a poetica ad eloquentiam traducenda duxerunt."

["After attention to this matter there is still the consideration of rhythm and the shape of words, a point which I am afraid Catulus here may view as childish; for the old masters held that in this prose style we are free to use what hardly differs from verse, that is, certain definite rhythms. For they thought that in speeches, the close of the period should come not when we are tired but where we can take a breath, and to be marked not by the punctuation of the copyists, but by the nature of the words and of the thoughts; and Isocrates is said to have started the practice of tightening up the loose style of ancient times (so his pupil Naucrates writes) by means of rhythm, designed to give pleasure to the ear.

"For two means of giving pleasure were devised by the musicians, who in the old days were also the poets: verse and melody, with the intention of overcoming satiety in the listener by pleasing the ear with the rhythm of the words and the mode of the notes. These two things, therefore, I mean the modulation of the voice and the arrangement of words in periods, they thought proper to transfer from poetry to rhetoric, so far as was compatible with the severe character of oratory."]

Here is the second, taken from Isidore's Origins, Book I, Chapter XX:

"Praeterea quaedam sententiarum notae apud celeberrimos auctores fuerunt, quasque antiqui ad distinctionem scripturarum carminibus et historiis apposuerunt. Nota est figura propria in litterae modum posita, ad demonstrandum unamquamque verbi sententiarumque ac versuum rationem. Notae autem versibus apponuntur numero XXVI, quae sunt nominibus infra scriptis, etc."

["Besides, there were certain of the meanings of a mark among the most famous authors, which also were used by the ancients for written distinctions in song and story. A mark is a definite character, placed in the manner of a letter, to indicate the meaning of each word and also the versification. But marks, 26 in number, which are written below names, etc., are put to verses."]

To me this shows that in Cicero’s time, good copyists made a practice of separating words, and of using signs equivalent to our punctuation marks. I see here the invention of number and of prose declamation attributed again to Isocrates. But I do not see anything here of all the written accent signs. And if I did find them, one could only conclude what I do not dispute, and what goes right back to my principles, namely, that when the Romans began to study Greek, the copyists invented accent marks, aspiration marks, and marks of prosody, to indicate their pronunciation. But by no means does it follow that these signs were in use among the Greeks, who would not need them.

CHAPTER EIGHT

General and Local Difference in the Origin of Languages

All that I have said so far applies to primitive tongues in general, and to such development as is due merely to the passage of time. But it does not explain either their origin or their differences. The principal cause that distinguishes them is local, deriving from the various climates in which they are born, and the way in which they take form. It is necessary to go back to this cause in order to understand the general and characteristic differences between the tongues of the south and those of the north. The great shortcoming of Europeans is always to philosophize on the origins of things exclusively in terms of what happens within their own milieu. They never fail to show us primitive men inhabiting a barren and harsh world, dying of cold and hunger, desperate for shelter and clothing, with nothing in sight but Europe's ice and snow. But they fail to realize that, just like all life, the human race originated in warm climes, and that on two-thirds of the globe, winter is hardly known. When one wants to study men, one must consider those around one. But to study man, one must extend the range of one's vision. One must first observe the differences in order to discover the properties.

The human race, born in warm lands, spread itself into cold areas where it multiplied, and then coursed back into the warm lands. From this action and reaction come the revolutions of the earth and the continual agitation of its inhabitants. Let us try to follow the order of nature in our investigations. I shall enter now upon a long digression on a subject so hackneyed it is trivial, but one to which it is nonetheless always necessary to return, in order to find the origin of human institutions.

CHAPTER NINE

Formation of the Southern Languages

In primitive times[1] the sparse human population had no more social structure than the family, no laws but those of nature, no language but that of gesture and some inarticulate sounds.[2] They were not bound by any idea of common brotherhood and, having no rule but that of force, they believed themselves each other's enemies. This belief was due to their weakness and ignorance. Knowing nothing, they feared everything. They attacked in self-defense. An individual isolated on the face of the earth, at the mercy of mankind, is bound to be a ferocious animal. He would be ready to do unto others all the evil that he feared from them. Fear and weakness are the sources of cruelty.

We develop social feeling only as we become enlightened. Although pity is native to the human heart, it would remain eternally quiescent unless it were activated by imagination. How are we moved to pity? By getting outside ourselves and identifying with a being who suffers. We suffer only as much as we believe him to suffer. It is not in ourselves, but in him that we suffer. It is clear that such transport supposes a great deal of acquired knowledge. How am I to imagine ills of which I have no idea? How would I suffer in seeing another suffer, if I know not what he is suffering, if I am ignorant of what he and I have in common. He who has never been reflective is incapable of being merciful or just or pitying. He is just as incapable of being malicious and vindictive. He who imagines nothing is aware only of himself; he is isolated in the midst of mankind.

Reflection is born of the comparison of ideas, and it is the plurality of ideas that leads to their comparison. One who is aware of only a single object has no basis for comparison. And those whose experience remains confined to the narrow range of their childhood also are incapable of such comparisons. Long familiarity deprives them of the attention requisite for such examination. But to the degree that something strikes us as novel, we want to know it. We seek rapport with those we know. Thus we come to ponder what is before our faces, and experience of the strange leads us to examine the familiar.

Apply these thoughts to primitive men and you see the reason for their barbarity. Never having seen anything beyond their own immediate milieu, they did not even understand that; they did not understand themselves. They had the concept of a father, a son, a brother, but not that of a man. Their hut contained all of their fellow men. Stranger, beast, monster: these were all one to them. Apart from themselves and their family, the whole universe would count as nothing to them.

This accounts for the apparent contradictions seen in the fathers of nations: so natural, and so inhuman; such ferocious behavior and such tender hearts; so much love for their families and such antipathy to their species. All their feelings, being concentrated on those near them, would be more intense. Everyone they knew would be dear to them; enemies the rest of the world, whom they did not see at all, of whom they were ignorant. They hated only those with whom they could not be acquainted.

These barbaric times were a golden age, not because men were united, but because they were separated. Each, it is said, considered himself master of all. That might be, but none of them knew or wanted to control anyone beyond those who were at hand. His needs, far from drawing him closer to his fellows, drove him from them. If you wish, men would attack each other when they met, but they rarely met. A state of war prevailed universally, and the entire earth was at peace.

The first men were hunters or shepherds, and not tillers of the soil; herdsmen, not men of the fields. Before the ownership of it was divided, no one thought to cultivate land. Agriculture is an art that requires tools. Sowing for harvest is a precaution which presupposes foresight. Man in society seeks to extend himself, while man in isolation retrenches. Beyond the range of his own vision or the reach of his arm, there are for him neither rights nor property. When Cyclops has rolled the stone in front of his cave, he and his herds are secure. But who would guard the crops of him for whom the laws do not give protection?

I am told that Cain was a farmer and Noah planted grapes. Why not? They were solitaries. What did they have to fear? Besides, this does not conflict with my thesis. I have said what I understand by primitive times. In becoming a fugitive, Cain was compelled to give up agriculture, and the wandering life of Noah's descendants forced them to give it up too. The earth has to be peopled before it can be cultivated; the two cannot very well be accomplished together. During the first dispersal of the human race, until the family was instituted, and man had stable habitation, there was no more agriculture. People completely without roots will not cultivate the land. Such were the Nomads; such were the Arabs, living under tents; the Scythians in their chariots; such are the wandering Tartars, even today, and the savages of America.

Generally, among all peoples of whose origins we know, one finds the earliest ones barbarous, voracious, and carnivorous rather than agricultural and granivorous. The Greeks indicate who first taught them to till the soil, and it seems they were unacquainted with this art until very late. But when they claim that before Triptolemus they lived only on nuts they are alleging an improbability. And it is contradicted by their own history. It seems they ate flesh meat before Triptolemus, since he forbade them to do so. Besides, it does not seem that they took his prohibition very seriously.

An ox was killed to regale the guests at a Homeric feast, just as today a suckling pig is killed. When one considers that Abraham served a calf to three people, that Eumaeus had two kids roasted for Ulysses' dinner, and that Rebecca ordered as many for that of her husband [Isaac], one can judge what terrible meat-eaters were the men of those times. In order to conceive of the repasts of the ancients, the like is to be seen today only in those of the savages: I was about to say those of the English.

The first cake to be eaten was the communion of the human race. When men began to settle, they cleared a little land around their huts, more of a garden than a field. They grew a little grain which they ground between stones, and made some cakes that they cooked under ashes or over coals or on a hot stone. These were eaten only on festive occasions. This ancient custom, which was consecrated by the Jews in the Pasch, is still preserved in Persia and the West Indies, where only unleavened bread is eaten. This bread is baked in thin sheets, and is [entirely] eaten at every meal. Raised bread was made only when they needed more: for leavening does not work well with small quantities.

I know there was already a great deal of agriculture in the time of the patriarchs. It was bound to be imported early into Palestine from neighboring Egypt. The Book of Job, perhaps the most ancient book extant, speaks of the cultivation of the fields. It lists five hundred pairs of oxen among the riches of Job. The word *pair* indicates that these oxen were teamed for work. It is said explicitly that these oxen were plowing when the Shebans seized them. It can be judged how much land five hundred pairs of oxen must have plowed.

All this is true. But the ages should not be confused. The patriarchal period that we know is very remote from primitive times. Scripture lists ten intervening generations at a time when men were very long-lived. What did they do during these ten generations? We know nothing about it. Living almost without society, widely scattered, hardly speaking at all, how could they write? And given the uniformity of their isolated life, what events would they have transmitted to us?

Adam spoke, Noah spoke; but it is known that Adam was taught by God himself. In scattering, the children of Noah abandoned agriculture, and the first common tongue perished with the first society. That had happened before there was any Tower of Babel. Solitaries, isolated on desert islands, have been known to forget their own tongue. Rarely do men preserve their first language outside their own country for more than a few generations, even when they are living in society and involved in ordinary occupations.

Scattered over the vast wilderness of the world, men would relapse into the stupid barbarism in which they would be if they were born of the earth. In pursuing such natural ideas, it is easy to reconcile the authority of Scripture with the ancient monuments; and one is not reduced to treating as fables traditions as ancient as the people who have transmitted them to us.

In that brutish condition it was necessary to live. And the most active, the most robust, those who were always pushing ahead, would want to live only on fruits and hunting. Thus they became bloodthirsty hunters and de spoilers; or, with time, warriors, conquerors, usurpers. History is stained with the memories of such crimes by these early kings. War and its conquests is just a kind of manhunt. Having conquered, they neglected to devour their victims: that was left to their successors.

The majority, being less active and more peaceful, settled down as soon as they could. They gathered and tamed cattle, which they rendered submissive to the human voice. To provide food for themselves, they learned to keep them and breed them; and thus pastoral life began.

Human industry begins to expand with the needs to which it gave rise. Of three modes of living possible to man, namely hunting, tending herds, and agriculture, the first develops strength, skill, and speed of body along with courage and guile of spirit. It hardens man and makes him ferocious. The land of hunters is not that of the hunt for long.[3] The process must be followed a step further, to horsemanship. The same process leads to the development of small arms: the sling, the arrow, the javelin. The pastoral art, father of repose and indolence, is the most self-sufficient. It provides man almost effortlessly with food and clothing as well as shelter. The tents of the first shepherds were made of animal skins. Of such was the roof on the ark; and of none other was the tabernacle of Moses. Concerning agriculture, which is slower to come into being: it is connected to all the arts; it leads to property, government, and laws, and gradually to the misery and crime that are inseparable for our species from the knowledge of good and evil. Nor did the Greeks consider Triptolemus merely as the inventor of a useful art, but as a teacher and sage from whom they received their initial formation and their first laws. On the other hand, Moses seems to have frowned upon agriculture in ascribing its invention to a reprobate, and having God reject its fruits. It is said that the first farmer[*1] proclaimed, in his character, the bad effects of his art. The author of Genesis saw further than Herodotus.

To the preceding division there correspond the three conditions of man considered in relation to society. The savage is a hunter, the barbarian is a herdsman, and civil man is a tiller of the soil.

When one investigates the origin of the arts and considers primitive customs, one sees that everything corresponds in its origin to the means of providing subsistence. And, as for those of these means that tend to bring men together, they are determined by the climate and by the nature of the soil. It is then by these same causes that the diversity of tongues and their contrasting characteristics must be explained.

The gentle climates, the fat and fertile lands, have been the first to be inhabited and the last in which nations formed, because in them men could be satisfied more easily than elsewhere and because there the needs which give rise to social structures make themselves felt later.

Supposing eternal spring on the earth; supposing plenty of water, livestock, and pasture, and supposing that men, as they leave the hands of nature, were once spread out in the midst of all that, I cannot imagine how they would ever be induced to give up their primitive liberty, abandoning the isolated pastoral life so fitted to their natural indolence,[4] to impose upon themselves unnecessarily the labors and the inevitable misery of a social mode of life.

He who willed man to be social, by the touch of a finger shifted the globe's axis into line with the axis of the universe. I see such a slight movement changing the face of the earth and deciding the vocation of mankind: in the distance I hear the joyous cries of a naive multitude; I see the building of castles and cities; I see the birth of the arts; I see nations forming, expanding, and dissolving, following each other like ocean waves; I see men leaving their homes, gathering to devour each other, and turning the rest of the world into a hideous desert: fitting monument to social union and the usefulness of the arts.

The earth nourishes men; but when their initial needs have dispersed them, other needs arise which reunite them, and it is only then that they speak, and that they have any incentive to speak. In order to avoid contradicting myself, I must be allowed time to explain myself.

If one lists the birthplaces of the founders of mankind, whence came the first settlements and the first emigrations, one does not name the happy climes of Asia Minor, Sicily, Africa, nor even Egypt, but the sands of Chaldea, the rocks of Phoenicia. You will find the same thing in any period. China has been populated by Chinese and it has also been populated by Tartars; the Scythians have flooded Europe and Asia; the mountains of Switzerland actually pour into our fertile regions a perpetual colony that shows no signs of ceasing.

It is said to be natural for the inhabitants of a barren land to leave it for a better one. Very well. But why do just these people swarm to just this better land, instead of some other? It must be in order to leave a hostile country; yet why are so many born there out of preference? It is believed that barren countries are peopled only with the surplus population of fertile lands, and we see that the opposite is true. The majority of Latin peoples are considered aborigenes,[5] whereas Great Greece, much more fertile, was peopled only by foreigners. The people of Greece all derived from various colonies, except those whose soil was the worst, namely the Attic people, who call themselves autochthonous, or self-born. Finally, without piercing the night of time, modern centuries afford a crucial observation. For what climate on earth is more wretched than that of what is called "the workshop of the world"?

Human associations are due largely to accidents of nature: particular floods, extravasations of the seas, volcanic eruptions, earthquakes, fires started by lightning and destroying forests, all were bound to frighten and disperse the savage inhabitants of a country, and were bound to bring them together afterward, for a common effort to recoup their common losses. Traditions of earthly calamities, so frequent in ancient times, show what instruments Providence uses to reunite people. Since societies have been established, these great accidents have ceased, or have become less frequent. It seems that is bound to be true even now. The same evils that unite separated people tend to separate those who are united.

The cycles of the seasons are another more general and more permanent cause that is bound to produce the same effect in the climates subject to this variety. Forced to provide for winter, people living under such conditions have to establish some sort of convention among themselves in order to help each other.

When the rigors of frigid weather make it impossible to get about, boredom tends to unite them as much as need: the Lapps, buried in ice; and the Eskimos, the most savage of people, huddle all winter in their caverns, and then in summer do not even know each other any more. Given somewhat greater development and enlightenment, and there you have, *mutatis mutandis*, any social union.

Neither the stomach nor the intestines of man are made to digest raw meat, nor does it usually suit his taste. With the possible single exception of the Eskimos, of whom I am going to speak, even savages cook their meat.

To the necessary use of fire for cooking is joined the pleasure it gives to the eye and the warmth so comforting to the body. The sight of the flames, from which animals flee, is attractive to man.[6] People gather around a common hearth where they feast and dance; the gentle bonds of habit tend imperceptibly to draw man closer to his own kind. And on this simple hearth burns the sacred fire that provokes in the depths of the heart the first feeling of humanity.

In warm countries, unevenly distributed springs and rivers are even more necessary rallying agents than other such f actors, since people are less able to do without water than fire. The barbarians especially, living off their herds, need common watering places. And we learn from the history of the earliest times that, in effect, this is where both their treaties and their disputes originated.[7] The flowing of waters can retard the society of people inhabiting well-irrigated places. On the other hand, in arid areas, there must be agreement on the sinking of wells and the building of canals for watering livestock. From time immemorial, men have united in such efforts, for such a country must either remain desert or be made habitable through human toil. But the penchant we have for turning everything to our own use necessitates some reflection on this point.

The original condition of the earth was quite different from what it is today, when we see it as embellished or marred by the hand of men. The chaos that poets attribute to the elements actually reigns in their own productions. In those remote times, when revolutions were frequent, when a thousand accidents changed the nature of the soil and the face of the earth, everything grew confusedly. Trees, vegetables, shrubs, pasture: no species had had time to appropriate land better suited to itself, on which it could suppress others. They would separate slowly, little by little, until suddenly a revolution would occur, which would confuse everything.

There is a similar relation between human needs and the products of the earth, which suffice for it to be peopled and for everyone to live. But before men could reunite and achieve some order in their production, through concerted effort, they had to live entirely according to nature, with no more stability than the hand of men maintains today. Nature maintained or redressed this balance by revolutions, while men maintained or reestablished it through their inconstancy. War, which no longer reigned among them, seemed to reign among the elements. Men did not burn cities, nor dig mines nor fell trees at all. But nature ignited volcanoes and caused earthquakes, lightning burned forests. A stroke of lightning, a flood, an eruption, could thus do in a few hours what, under present conditions, takes fifty thousand men a century. Otherwise I do not see how the system could be kept standing and equilibrium be maintained. In the two types of order, the greater species will finally absorb the lesser.[8] The entire earth would soon be covered with nothing but trees and ferocious beasts, and finally all would perish.

The water cycle which vivifies the earth has gradually lessened. The mountains are wearing down. The rivers rush on, the sea fills up and expands, and everything tends imperceptibly to level off. The hand of man curbs this tendency and slows its progress; otherwise it would be more rapid, perhaps the earth would already be under water. Prior to human intervention, poorly distributed springs flowed irregularly, so that the earth was less effectively enriched and it was more difficult for its inhabitants to get drinking water. Rivers would have been inaccessible, their banks either steep or marshy. Human art would not keep them within their banks, which they would frequently overflow to the left or right, changing their direction and their course, diverging into various branches. Sometimes they would dry up, and sometimes quicksand would block the way to them, so that they might as well not have existed, for one would die of thirst in the midst of their waters.

How many arid countries are habitable only because of trenches and canals that men had drawn off from rivers! Almost all of Persia is able to live only by this artifice. Their canals help the Chinese to constitute a single people. Without theirs, the Netherlands would be inundated by rivers, as they would be by the sea without their dikes. Egypt, the most fertile land on earth, is habitable only because of human toil. In the great plains, where there are no rivers and the land is flat, wells are the only source. If then, the first people of whom mention is made in history did not live in lush countries or on flowing shores, it is not that these delightful climes were deserts, but rather that their numerous inhabitants, desirous of avoiding each other, would remain isolated for a longer time within their families, without communication. But in the arid places where water could be had only from wells, people had to rejoin one another to sink the wells, or at least to agree upon their use. Such must have been the origin of societies and languages in warm countries.

That is where the first ties were formed among families; there were the first rendezvous of the two sexes. Girls would come to seek water for the household, young men would come to water their herds. There eyes, accustomed to the same sights since infancy, began to see with increased pleasure. The heart is moved by these novel objects; an unknown attraction renders it less savage; it feels pleasure at not being alone. Imperceptibly, water becomes more necessary. The livestock become thirsty more often. One would arrive in haste and leave with regret. In that happy age when nothing marked the hours, nothing would oblige one to count them; the only measure of time would be the alternation of amusement and boredom. Under old oaks, conquerors of the years, an ardent youth will gradually lose his ferocity. Little by little they become less shy with each other. In trying to make oneself understood, one learns to explain oneself. There too, the original festivals developed. Feet skipped with joy, earnest gestures no longer sufficed, being accompanied by an impassioned voice; pleasure and desire mingled and were felt together. There at last was the true cradle of nations: from the pure crystal of the fountains flow the first fires of love.

What then! Before that time did men spring from the earth? Did generations succeed each other without any union of the sexes, and without anyone being understood? No: there were families, but there were no nations. There were domestic languages, but there were no popular ones. There were marriages but there was no love at all. Each family was self-sufficient and perpetuated itself exclusively by inbreeding. Children of the same parents grew up together and gradually they found ways of expressing themselves to each other: the sexes became obvious with age; natural inclination sufficed to unite them. Instinct held the place of passion; habit held the place of preference. They became husband and wife without ceasing to be brother and sister.[9] There would be nothing stimulating enough in that to loosen the tongue, nothing to provoke accents of ardent passion often enough to conventionalize them. And it was possible for men to say enough about their rare and minor needs to enable them to work together. One would start the basin of a fountain and the other would follow through and finish it, often without their coming to any kind of agreement, sometimes even without their seeing each other. In a word, in a mild climate with fertile land, it took all the animation of pleasurable feelings to start the people speaking. The first tongues, children of pleasure rather than need, long bore the mark of their father. They lost their seductive tone with the advent of feelings to which they had given birth, when new needs arose among men, forcing each to be mindful only of his own welfare, and to withdraw his heart into himself.

CHAPTER TEN

Formation of the Languages of the North

Eventually all men became similar, but the order of their progress is different. In southern climes, where nature is bountiful, needs are born of passion. In cold countries, where she is miserly, passions are born of need, and the languages, sad daughters of necessity, reflect their austere origin.

Although man becomes accustomed to extremes of wind, cold, sickness, and even hunger, he still has his breaking point. Falling prey to such cruel ordeals, the weak perish. The strong become stronger; there is no mean at all between vigor and death. That is why northern peoples are so robust. It is not, as it first seems, that the climate makes them so, but only those who are could stand it. And it is not surprising that children should have the strong constitution of their fathers.

One can see already that the men, being more robust, are bound to have less delicate voices. Their voices are bound to be rougher and stronger. Besides, what a difference between the touching inflections that express the stirrings of the soul, and the cries of physical needs! In those wretched climates where everything is dead for nine months of the year, where the sun warms the air for only a few weeks, to inform the inhabitants of the benefits they are missing, and prolong their misery; where the earth yields nothing except through toil, and where life seems to come more from the arms than the heart, where men are ceaselessly busy providing for their subsistence, they hardly think of pleasanter ties. Everything is limited by physical motives. Occasion dictates choice; facility dictates preference. The idleness that nurtures passion is replaced by work, which represses it. Instead of being concerned with living happily, one had to be concerned with living. Mutual need uniting men to a greater extent when sentiment has not done so, society would be formed only through industry. The ever-present danger of perishing would not permit of a language restricted to gesture. And, the first words among them were not *love me* [*aimez-moi*] but *help me* [*aidez-moi*].

These two expressions, although similar enough, are pronounced in a very different tone. The whole point was not to make someone feel something, but to make him understand. Thus what was needed was not vigor but clarity. For the accents which the heart does not provide, distinct articulation is substituted. And if some trace of nature remains in the form of the language, this too contributes to its austerity.

Northern men are not passionless, but their passions are, in effect, those of another species. The passions of the warm countries are voluptuous, relating to love and tenderness. Nature does so much for people there that they have almost nothing to do. Provided that an Asiatic has women and repose, he is contented. But in the north, where people consume a great deal, on barren soil, men are easily irritated, being subject to so many needs. Anything happening near them disturbs them. As they subsist only through effort, the poorer they are the more firmly they hold to the little they have. To approach them is to threaten their lives. This is what accounts for their irascible temper, their quickness to attack anyone who offends them. Thus too their most natural tone of voice is angry and menacing, and their words are always accompanied by emphatic articulation, which makes them harsh and loud.

CHAPTER ELEVEN

Reflections on These Differences

These, in my opinion are the most general physical causes of the characteristic differences of the primitive tongues. Those of the south are bound to be sonorous, accented, eloquent, and frequently obscure because of their power. Those of the north are bound to be dull, harsh, articulated, shrill, monotonous, and to have a clarity due more to vocabulary than to good construction. The modem tongues, with all their intermingling and recasting, still retain something of these differences. French, English, German: each is a language private to a group of men who help each other, or who become angry. But the ministers of the gods proclaiming sacred mysteries, sages giving laws to their people, leaders swaying the multitude, have to speak Arabic or Persian.[1] Our tongues are better suited to writing than speaking, and there is more pleasure in reading us than in listening to us. Oriental tongues, on the other hand, lose their life and warmth when they are written. The words do not convey half the meaning; all the effectiveness is in the tone of voice. Judging the Orientals from their books is like painting a man's portrait from his corpse.

For a proper appreciation of their actions, men must be considered in all their relationships: which we simply are not capable of doing. When we put ourselves in the position of others, we do not become what they must be, but remain ourselves, modified. And, when we think we are judging them rationally, we merely compare their prejudices to ours. Thus, if one who read a little Arabic and enjoyed leafing through the Koran were to hear Mohammed personally proclaim in that eloquent, rhythmic tongue, with that sonorous and persuasive voice, seducing first the ears, then the heart, every sentence alive with enthusiasm, he would prostrate himself, crying: Great prophet, messenger of God, lead us to glory, to martyrdom. We will conquer or die for you. Fanaticism always seems ridiculous to us, because there is no voice us to make it understood. Our own fanatics are not authentic fanatics. They are merely rogues or fools. Instead of inspirational inflections, our tongues allow only for cries of diabolic possession.

CHAPTER TWELVE

The Origin of Music and Its Relations

With the first voices came the first articulations or sounds formed according to the respective passions that dictated them. Anger produces menacing cries articulated by the tongue and the palate. But the voice of tenderness is softer: its medium is the glottis. And such an utterance becomes a sound. It may occur with ordinary or unusual tones, it may be more or less sharply accented, according to the feeling to which it is joined. Thus rhythm and sounds are born with syllables: all voices speak under the influence of passion, which adorns them with all their éclat. Thus verse, singing, and speech have a common origin. Around the fountains of which I spoke, the first discourses were the first songs. The periodic recurrences and measures of rhythm, the melodious modulations of accent, gave birth to poetry and music along with language. Or, rather that was the only language in those happy climes and happy times, when the only pressing needs that required the agreement of others were those to which the heart gave birth.

The first tales, the first speeches, the first laws, were in verse. Poetry was devised before prose. That was bound to be, since feelings speak before reason. And so it was bound to be the same with music. At first, there was no music but melody and no other melody than the varied sounds of speech. Accents constituted singing, quantity constituted measure, and one spoke as much by natural sounds and rhythm as by articulations and words. To speak and to sing were formerly one, says Strabo, which shows that in his opinion poetry is the source of eloquence.[1] It should be said that both had the same source, not that they were initially the same thing. Considering the way in which the earliest societies were bound together, is it surprising that the first stories were in verse and the first laws were sung? Is it surprising that the first grammarians subordinated their art to music and were professors of both?[2]

A tongue which has only articulations and words has only half its riches. True, it expresses ideas; but for the expression of feelings and images it still needs rhythm and sounds, which is to say melody, something the Greek tongue has and ours lacks.

We are always astonished by the prodigious effects of eloquence, poetry, and music among the Greeks. These effects are incomprehensible to our minds because we do not try to do such things any more. All that we can manage is to appear to believe them out of kindness toward our scholars.[3] Burette, having translated certain Greek musical pieces as well as could be, into our musical notation, was simple enough to have them played at the Academy of Belles-Lettres; and the academicians were patient enough to listen to them. Such an experiment is admirable, in a country whose music all other nations find indescribable. Ask any foreign musician to perform a French operatic monologue and I defy you to recognize any part of it. Yet these are the same Frenchmen who purport to determine the melody of an ode of Pindar set to music two thousand years ago!

I have read that the Indians in America, having seen the amazing results of firearms, would gather musket balls from the ground; they would throw them by hand, making a loud noise with the mouth. They were quite surprised that they did not kill anyone. Our orators, our musicians, and our scholars are like these Indians. It is not remarkable that we do not do as much with our music as the Greeks did with theirs. On the contrary, it would be remarkable if one produced the same results with such different instruments.

CHAPTER THIRTEEN

On Melody

No one doubts that man is changed by his feelings. But instead of distinguishing the changes, we confuse them with their causes. We attach far too little importance to sensations. We do not see that frequently they have no effect on us merely as sensations, but as signs or images, and also that their moral effects have moral causes. Just as the feelings that a painting excites in us are not at all due to colors, the power of music over our souls is not at all the work of sounds. Beautiful, subtly shaded colors are a pleasing sight; but this is purely a pleasure of the sense. It is the drawing, the representation, which gives life and spirit to these colors. The passions they express are what stir ours; the objects they represent are what affect us. Colors entail no interest or feeling at all. The strokes of a touching picture affect us even in a print. Without these strokes in the picture, the colors would do nothing more.

The role of melody in music is precisely that of drawing in a painting. This is what constitutes the strokes and figures, of which the harmony and the sounds are merely the colors. But, it is said, melody is merely a succession of sounds. No doubt. And drawing is only an arrangement of colors. An orator uses ink to write out his compositions: does that mean ink is a very eloquent liquid?

Imagine a country in which no one has any idea of drawing, but where many people who spend their lives combining and mixing various shades of color are considered to excel at painting. Those people would regard our painting precisely as we consider Greek music. If they heard of the emotions aroused in us by beautiful paintings, the spell of a pathetic scene, their scholars would rush into a ponderous investigation of the material, comparing their colors to ours, determining whether our green is more delicate or our red more brilliant. They would try to find out which color combinations drew tears, which could arouse anger. The Burettes of that country would examine just a few tattered scraps of our paintings. Then they would ask with surprise what is so remarkable about such coloring.

And, if a start were made in a neighboring country toward the development of line and stroke, an incipient drawing, some still imperfect figure, it would all be treated as merely capricious, baroque daubing. And, for the sake of taste, one would cling to this simple style, which really expresses nothing, but brilliantly produces beautiful nuances, big slabs of color, long series of gradually shaded hues, without a hint of drawing.

Finally, the power of progress would lead to experiments with the prism. And immediately some famous artist would base a beautiful system on it. Gentlemen, he will tell you, true philosophy requires that things be traced to physical causes. Behold the analysis of light; behold the primary colors; observe their relations, their proportions. These are the true principles of the pleasure that painting gives you. All this mysterious talk of drawing, representation, figure, is just the charlatanry of French painters who think that by their imitations they can produce I know not what stirrings of the spirit, while it is known that nothing is involved but sensation. You hear of the marvels of their pictures; but look at my colors.

French painters, he would continue, may have seen a rainbow. Nature may have given them some taste for nuance, some sense of color. But I have revealed to you the great and true principles of art. I say of art! of all the arts, gentlemen, and of all the sciences. The analysis of colors, the calculation of prismatic refractions, give you the only exact relations in nature, the rule of all relations. And everything in the universe is nothing but relations. Thus one knows everything when one knows how to paint; one knows everything when one knows how to match colors.

What are we to say of a painter sufficiently devoid of feeling and taste to think like that, stupidly restricting the pleasurable character of his art to its mere mechanics? What shall we say of a musician, similarly quite prejudiced, who considers harmony the sole source of the great effects of music. Let us consign the first to housepainting and condemn the other to doing French opera.

Music is no more the art of combining sounds to please the ear than painting is the art of combining colors to please the eye. If there were no more to it than that, they would both be natural sciences rather than fine arts. Imitation alone raises them to this level. But what makes painting an imitative art? Drawing. What makes music another? Melody.

CHAPTER FOURTEEN

On Harmony

The beauty of sounds is natural. Their effect is purely physical. It is due to the coincidence of various particles of air set in motion by the sonorous body and all their aliquots, perhaps to infinity: the total effect is pleasing. Everyone in the world takes pleasure in hearing beautiful sounds. But if the pleasure is not enlivened by melodious inflections that are familiar to them, it will not be at all delightful, will not become at all voluptuous. The songs most beautiful to us will only moderately move those to whom they are quite unfamiliar. It is a tongue for which one needs a dictionary.

Harmony, properly speaking, is a still more difficult matter. Being only conventionally beautiful, it does not in any way please the completely unpracticed ear. Development of sensitivity and taste for it requires long exposure. To the uncultured ear, our consonances are merely noise. It is not surprising that when natural proportions are impaired, the corresponding natural pleasure is destroyed.

A sound is accompanied by all its concomitant harmonic sounds so related in terms of power and interval as to harmonize most perfectly with that sound. Join to it the third or fifth or some other consonance; you do not join anything to it, you redouble it. You retain the relation of interval while changing that of force. By intensifying one consonance and not the others, you break up the proportion. In trying to do better than nature, you do worse. Your ear and your taste are impaired by a poor understanding of the art. Naturally, the only harmony is unison.

M. Rameau proposes that, by a certain unity, each treble naturally suggests its bass and that an untrained person with a true ear will naturally begin to sing that bass. That is the prejudice of a musician, against all experience. Not only will those who have no idea of either bass or harmony fail to find it, but even if they could be made to understand it, they would be displeased by it, preferring simple unison.

Even if one spent a thousand years calculating the relations of sounds and the laws of harmony, how would one ever make of that art an imitative art? Where is the principle of this supposed imitation? Of what harmony is it the sign? And what do chords have in common with our passions?

When the same question is applied to melody, the reply is the same: it is in the mind of the reader beforehand. By imitating the inflections of the voice, melody expresses pity, cries of sorrow and joy, threats and groans. All the vocal signs of passion are within its domain. It imitates the tones of languages, and the twists produced in every idiom by certain psychic acts [*mouvemens de l'âme*]. Not only does it imitate, it bespeaks. And its language, though inarticulate, is lively, ardent, passionate; and it has a hundred times the vigor of speech itself. This is what gives music its power of representation and song its power over sensitive hearts. In certain systems, harmony can bring about unification through binding the succession of sounds according to laws of modulation; rendering intonation more appropriate and offering some definite aural evidence of this aptness; fixing and reconciling consonant intervals, and coordinating imperceptible inflections. But in the process it also shackles melody, draining it of energy and expressiveness. It wipes out passionate accent, replacing it with the harmonic interval. It is restricted to only two types of songs, within which its possibilities are determined by the number of oral tones. It eliminates many sounds or intervals which do not fit into its system. Thus in brief, it separates singing from speech, setting these two languages against each other to their mutual deprivation of all authenticity, so that it is absurd for them to occur together in a pathetic subject. That is why the expression of strong and serious passion in song always seems ridiculous, for it is known that in our languages the passions have no musical inflection at all, and that northern peoples do not die singing any more than swans do.

By itself, harmony is insufficient even for those expressions that seem to depend uniquely on it. Thunder, murmuring waters, winds, tempests, are but poorly rendered by simple harmonies. Whatever one does, noise alone does not speak to the spirit at all. The objects of which one speaks must be understood. In all imitation, some form of discourse must substitute for the voice of nature. The musician who would represent noise by noise deceives himself. He knows nothing of either the weakness or the strength of his art, concerning which his judgment is tasteless and unenlightened.

Let him realize that he will have to render noise in song; that to produce the croaking of frogs, he will have to have them sing. For it is not enough to imitate them; he must do so touchingly and pleasantly. Otherwise, his tedious imitation is nothing, and will neither interest nor impress anyone.

CHAPTER FIFTEEN

That Our Most Lively Sensations Frequently Are Produced by Moral Impressions

As much as one might want to consider sounds only in terms of the shock that they excite in our nerves, this would not touch the true principle of music, nor its power over men's hearts. The sounds of a melody do not affect us merely as sounds, but as signs of our affections, of our feelings. It is thus that they excite in us the emotions which it expresses, whose image we recognize in it. Something of this moral effect is perceivable even in animals. The barking of one dog will attract another. When my cat hears me imitate a mewing, I see it become immediately attentive, alert, agitated. When it discovers that I am just counterfeiting the voice of its species, it relaxes and resumes its rest. Since there is nothing at all different in the stimulation of the sense organ, and the cat had initially been deceived, what accounts for the difference?

Unless the influence of sensations upon us is due mainly to moral causes, why are we so sensitive to impressions that mean nothing to the uncivilized? Why is our most touching music only a pointless noise to the ear of a West Indian? Are his nerves of a different nature from ours? Why are they not excited in the same way? Or, why should the same stimulus excite some people very much and others so little?

The healing of tarantula bites is cited in proof of the physical power of sounds. But in fact this evidence proves quite the opposite. What is needed for curing those bitten by this insect are neither isolated sounds, nor even simply tunes. Rather, each needs tunes with familiar melodies and understandable lyrics. Italian tunes are needed for Italians; for Turks, Turkish tunes. Each is affected only by accents familiar to him. His nerves yield only to what his spirit predisposes them. One must speak to him in a language he understands, if he is to be moved by what he is told. The cantatas of Bernier are said to have cured the fever of a French musician. They would have given one to a musician of any other nation.

The same differences can be observed relative to the other senses, even the crudest. Suppose a man has his hand placed and his eyes fixed upon the same object, while he alternately believes it to be alive and not alive: the effect on his senses would be the same, but what a different impression! Roundness, whiteness, firmness, pleasant warmth, springy resistance, and successive rising, would give him only a pleasant but insipid feeling if he did not believe he felt a heart full of life beating under it all.

I know of only one affective sense in which there is no moral element: that is taste. And, accordingly, gluttony is the main vice only of those who have no sense of taste.

If those who philosophize about the power of sensations would begin by distinguishing pure sense impressions from the intellectual and moral impressions received through the senses, but of which the senses are only the occasional causes, they would avoid the error of attributing to sense objects a power they do not have, or that they have only in relation to affections of the soul which they represent to us. Colors and sounds can do much, as representatives and signs, very little simply as objects of sense. Series of sounds or of chords will perhaps amuse me for a moment; but to charm me and soften me, these series must offer something that is neither sound nor chord, and moves me in spite of myself. Even songs that are merely pleasant but say nothing, are tiresome. For the ear does not so much convey pleasure to the heart as the heart conveys it to the ear. I believe that through developing these ideas, we shall be spared stupid arguments about ancient music. But in this century when all the operations of the soul have to be materialized, and deprived of all morality and human feeling, I am deluded if the new philosophy does not become as destructive of good taste as of virtue.

CHAPTER SIXTEEN

False Analogy between Colors and Sounds

There is no kind of absurdity that has not been given a place in the treatment of fine arts by physical observation. The same relations have been discovered in the analysis of sound as in the analysis of light. This analogy has been seized upon immediately and eagerly, with no concern for reason or experience. The systematizing spirit has confused everything, and presumes, out of ignorance, to paint for the ears and sing for the eyes. I have seen the famous clavichord on which music is supposedly made with colors. It would be a complete misunderstanding of the workings of nature not to see that the effect of colors is in their stability and that that of sounds is in their succession.

All the riches of color display themselves at a given moment. Everything is taken in at first glance. But the more one looks, the more one is enchanted; one need only admire and contemplate, endlessly.

This is not true of sound. Nature does not analyze sounds or isolate harmonics. On the contrary, it hides such distinctions under the appearance of unison. Or, if it does sometimes separate them, as in the modulated singing of man and the warbling of some birds, it is in succession, one after the other. Nature inspires songs, not accords; she speaks of melody, not harmony. Colors are the clothing of inanimate objects. All matter is colored. But sounds manifest movement. A voice bespeaks a sensitive being. Only living bodies sing. It is not an automatic flute player that plays the flute; it is the engineer who measured the wind and made the fingers move.

Thus each sense has its proper domain. The domain of music is time; that of painting is space. To multiply the sounds heard at a given time, or to present colors in sequence, is to alter their economy, putting the eye in the place of the ear, and the ear in the place of the eye.

You say: Just as color is determined by the angle of refraction of the ray it emits, each sound is determined by the number of vibrations of a sounding object in a given time period. But the relations of these angles and of these numbers will be the same. The analogy is evident. Agreed. Yet this analogy is rational, not experiential. So this is not an issue. The angle of refraction is primarily experiential and measurable, while the number of vibrations is not. Sounding bodies, subject to air currents, incessantly change in volume and tone. Colors are durable, sounds vanish.

And one is never sure that later sounds will be the same as those that preceded. Further, each color is absolute and independent while each sound is, for us, only relative, distinguished only by comparison. A sound, considered in itself, has no absolute character by which it is recognizable. It is hard or soft, has an acute or grave accent in relation to another. In itself, none of this applies to it. Even in the harmonic system, no sound is anything by nature. It is neither tonic, nor dominant, nor harmonic nor fundamental, because all these properties are only relational; and because the whole system could vary from grave to acute, each sound changing its rank and position in the system according to the extent to which the system itself changes. But the properties of colors are not at all relational. Yellow is yellow, independently of red and of blue. Everywhere it is sensate and recognizable. As soon as its angle of refraction is determined, one can be certain that one has the same yellow at all times.

The locus of colors is not in colored bodies, but in light. For an object to be visible, it must be illuminated. Sounds also need a mover, and in order for them to exist, a sonorous body must be struck. This is another advantage of sight, for the perpetual emanation of the stars is its natural stimulus, while nature alone engenders little sound. And, unless one believes in the harmony of the celestial spheres, it must be produced by living beings.

From this it is evident that painting is closer to nature and that music is more dependent on human art. It is evident also that the one is more interesting than the other precisely because it does more to relate man to man, and always gives us some idea of our kind. Painting is often dead and inanimate. It can carry you to the depths of the desert; but as soon as vocal signs strike your ear, they announce to you a being like yourself. They are, so to speak, the voice of the soul. If you hear them in the wilderness, they tell you you are not there alone. Birds whistle; man alone sings. And one cannot hear either singing or a symphony without immediately acknowledging the presence of another intelligent being.

It is one of the great advantages of the musician that he can represent things that cannot be heard, while it is impossible to represent in painting things which cannot be seen. And the greatest marvel, for an art whose only medium is motion, is to represent repose. Sleep, the calm of night, even silence, enter into musical pictures. It is known that noise can produce the effect of silence, and silence the effect of noise, as when one falls asleep at a dull monotonous lecture and wakes up as soon as it ends. But music affects us more deeply, arousing through one sense feelings similar to those aroused through another. But, since its result must be perceptible, and its impression weak, painting lacks this power: it cannot imitate music as music can imitate it. Even if the whole of nature were asleep, those who contemplate it would not be. And the musician's art consists of substituting for an imperceptible image of the object the movements which its presence excites in the heart of the contemplator. Not only will it agitate the sea, fan flames, and engorge a stream, but it will depict the horrors of a frightening wilderness, darken the walls of a dungeon, calm a tempest, subdue the winds, and the orchestra will lavish new freshness upon the forest. It does not represent these things directly, but excites in the soul the same feelings one experiences in seeing them.

CHAPTER SEVENTEEN

An Error of Musicians Harmful to Their Art

See how everything continually takes us back to the moral effects of which I spoke, and how far from understanding the power of their art are those many musicians who think of the potency of sounds only in terms of air pressure and string vibrations. The more they assimilate it to purely physical impressions, the farther they get from its source and the more they deprive it of its primitive energy. In dropping its oral tone and sticking exclusively to the establishment of harmonics, music becomes noisier to the ear and less pleasing to the heart. As soon as it stops singing, it stops speaking. And then, with all its accord and all its harmony it will have no more effect upon us.

CHAPTER EIGHTEEN

That the Greek Musical System Had No Relation to Ours

How have such changes occurred? Through a natural change in the character of the tongues. It is known that our harmony is a Gothic invention. Those who claim to find the system of the Greeks in ours are ridiculous. The Greek system was absolutely devoid of harmonics in our sense, which requires the instruments to be tuned to perfect agreement. Stringed instruments always have to be tuned in consonance. But people who do not use stringed instruments have inflections in their singing which we consider false because they do not fit into our system and we do not care to note them. This can be observed in the singing of American savages, and is bound to be observable in various periods of Greek music too, if it is studied without a prejudice in favor of our own. The Greeks divided their scale by tetrachords, as we divide our keyboard by octaves; and the same divisions were repeated in each of their tetrachords as are repeated in each of our octaves. This is a similitude which could not be preserved and would not even be suspected, in the unity of harmonic mode. But since one proceeds by smaller intervals in speaking than in singing, it would be natural for them to treat the repetition of tetrachords in their oral melody as we treat the repetition of octaves in our harmonic melody.

The only consonances they would recognize are those we call perfect consonances. They would preclude thirds and sixths from this category. Why was that? Because they ignored, or at least in practice they proscribed, the minor tone interval. And their consonances were not at all tempered. All their major thirds were too strong and their minor thirds too weak for a comma. Consequently their major and minor sixths were reciprocally impaired in the same way. Just think what our idea of harmony would be, and what harmonic modes could be established by eliminating thirds and sixths as consonances. If they had any real sense of harmony, even for those consonances they did allow, their songs would have contained, at least implicitly, the consonance of fundamental progressions which, having given its name to the diatonic scale, would have suggested it to them. Rather than having fewer consonances than we, they would have had more. And, preoccupied by the bass *ut sol* for example, they would have called the second *ut re*, a consonance.

But then why speak of diatonic progressions? In accord with our inclination to choose the most convenient inflections in an accented and singable language. Because of the extremely difficult glottal stops involved in the long intervals of the consonances, and the difficulty of controlling intonation in the very complicated relations of shorter intervals, the voice takes a middle course, falling naturally upon intervals shorter than consonances and simpler than commas. And yet the shorter intervals did not have the same use as they, in the more affective genres.

CHAPTER NINETEEN

How Music Has Degenerated

To the degree that language improved, melody, being governed by new rules, imperceptibly lost its former energy, and the calculus of intervals was substituted for nicety of inflection. That is how, for example, the sub-harmonic genre gradually fell into disuse. When the theaters had taken a regular form, all singing was according to prescribed modes. And, to the degree that the rules of limitation proliferated, imitative language was enfeebled.

The study of philosophy and the progress of reason, while having perfected grammar, deprive language of its vital, passionate quality which made it so singable. Composers, who originally were engaged by poets and worked only for them, under their direction so to speak, were becoming independent as early as the time of Melanippides and Philoxenus. This is the license of which Music complains so bitterly in a comedy of Pherecrates, according to the passage preserved by Plutarch. Thus melody, originally an aspect of discourse, imperceptibly assumes a separate existence and music becomes more independent of speech. That is also when it stopped producing the marvels it had produced when it was merely the accent and harmony of poetry and gave to it the power over the passions that speech subsequently exercised only on reason. Also, Greece was then full of sophists and philosophers, though she no longer had any famous musicians or poets. In cultivating the art of convincing, that of arousing the emotions was lost. Plato himself, envious of Homer and Euripides, decried the one and was unable to imitate the other.

Servitude soon joined forces with philosophy. In fetters, Greece lost the fire that warms only free spirits, and in praising her tyrants, she never recovered the style in which she had sung her heroes. The intermingling of the Romans further weakened whatever harmony and accent remained to the language. Latin, a less musical, more surded tongue, did harm to the music in adopting it. The singing employed in the capital gradually corrupted that of the provinces. The Roman theaters were sustained by those of Athens. When Nero carried off the prize, Greece had ceased to merit it. And the same melodiousness, parceled between two tongues, is less well suited to either.

Finally came the catastrophe that disrupted the progress of the human spirit without removing the faults that were its product. Europe, flooded with barbarians, enslaved by ignoramuses, lost at the same time her sciences, her arts, and that universal instrument of both: that is, harmoniously perfected language. Imperceptibly, every ear became accustomed to the rude voices of these coarse men engendered by the North. Their harsh, expressionless voices were noisy without being sonorous. The Emperor Julian compared Gallic speech to the croaking of frogs. All their articulations, like their voices, being nasal and muffled, they could give only some kind of distinctness to their singing, augmenting the vowel sounds to cover up the abundance and harshness of the consonants.

The noisy singing, along with the monotonous voices, forced the newcomers and their subjects, who imitated them, to say everything slowly in order to be understood. The laborious enunciation and the exaggerated sounds contributed equally to the elimination of all sense of measure and rhythm from melody. Since most of their difficulty of pronunciation would be in making transitions from one sound to another, there was nothing better to do than hesitate at each as long as possible to expand it, making it as distinct as possible. Singing soon became no more than a slow, tiresome sequence of drawling sounds and yells, without softness, without measure, and without grace. Should any scholars point out that it was necessary to observe the long and the short syllables in Latin singing, it is certain at least that verses were sung as prose, with no further question of feet or rhythm nor any other kind of measured singing.

That singing was thus devoid of melody, consisting solely of volume and duration of the sounds, was bound to suggest at last a way of making it more melodious again, with the help of the consonances. Several voices, ceaselessly drawling sounds of unlimited duration, in unison, happened upon some harmonies, which seemed pleasant to them because they added to the noise. And thus began the practice of descant and of counterpoint.

I skip many centuries during which the musicians pondered vain questions, the result, as is known, of ignoring a principle. Even the most indefatigable reader will not wade through eight or ten long chapters of Jean de Muris' verbiage to learn whether it is the fifth or the fourth that is to be flat in the interval of an octave divided into two consonances. And four hundred years later, in Bontempi, one finds equally tedious enumerations of all the basses that must carry the sixth instead of the fifth. Thus harmony imperceptibly took the course prescribed for it by analysis, until finally the invention of the minor mode and of dissonances introduced the arbitrariness of which it is full, and which only prejudice prevents our perceiving.[1]

Melody was forgotten when musicians gave their full attention to harmony, gradually letting themselves be governed entirely according to this novelty. The genres, the modes, the scale, all received new faces. Harmonic successions came to dictate the sequence of parts. This sequence having usurped the name of melody, it was, in effect, impossible to recognize the traits of its mother in this new melody.

And our musical system having thus gradually become purely harmonic, it is not surprising that its oral tone had suffered, and that our music had lost almost all its energy.

Thus we see how singing gradually became an art entirely separate from speech, from which it takes its origin; how the harmonics of sounds resulted in forgetting vocal inflections; and finally, how music, restricted to purely physical concurrences of vibrations, found itself deprived of the moral power it had yielded when it was the twofold voice of nature.

CHAPTER TWENTY

Relationship of Languages to Government

These developments are neither fortuitous nor arbitrary. They belong to the vicissitudes of things. The languages develop naturally on the basis of men's needs, changing and varying as those needs change. In ancient times, when persuasion played the role of public force, eloquence was necessary. Of what use would it be today, when public force has replaced persuasion. One needs neither art nor metaphor to say *such is my pleasure.* What sort of public discourses remain then? Sermons. And why should those who preach them be concerned to persuade the people, since it is not they who dispose of benefices. Our popular tongues have become just as completely useless as eloquence. Societies have assumed their final form: no longer is anything changed except by arms and cash. And since there is nothing to say to people besides *give money*, it is said with placards on street corners or by soldiers in their homes. It is not necessary to assemble anyone for that. On the contrary, the subjects must be kept apart. That is the first maxim of modern politics.

There are some tongues favorable to liberty. They are the sonorous, prosodic, harmonious tongues in which discourse can be understood from a great distance. Ours are made for murmuring on couches. Our preachers torment themselves, work themselves into a sweat in the pulpit without anyone knowing anything of what they have said. After exhausting themselves shouting for an hour, they collapse in a chair, half dead. Surely it would not be work that fatigues them so.

It was easy for the ancients to make themselves understood by people in public. They could speak all day with no discomfort. Generals could address their troops and be understood, with no exhaustion at all. Modern historians who wanted to include harangues in their account would be able to do no more than caricature them. If a man were to harangue the people of Paris in the Place Vendôme in French, if he shouted at the top of his voice, people would hear him shouting, but they would not be able to distinguish a word. Herodotus would recite his history to Greek audiences in the open air, and everyone would restrain himself from applauding. Today, the people in the rear of the room strain to hear an academician read a memorandum at a public assembly. If charlatans are less common in the public squares of France than in those of Italy, it is not because they would receive less attention in France, but only because they would not be as well understood. M.

d’Alembert thought that French recitative could be sold to the Italians. Then it would have to be sold to the ear, or it would not be understood at all. But I say that any tongue with which one cannot make oneself understood to the people assembled is a slavish tongue. It is impossible for a people to remain free and speak that tongue.

These superficial reflections, which hopefully might give birth to more profound ones, I shall conclude with the passage that suggested them to me:

To observe in fact and to show by examples, the degree to which the character, customs and interests of a people influence their language, would provide material for a sufficiently philosophical investigation.[1]

NOTES

CHAPTER ONE

[1] There remained only 600 men, with no women or children.

[2] I have said elsewhere why feigned misfortunes touch us more than real ones. There is a type that weeps at a tragedy, yet has never had any pity for the suffering. The invention of theater is remarkable for inflating our pride with all the virtues in which we are entirely lacking.

[3] Many very common items, such as an orange, a ribbon, charcoal, etc., are used as salaams, the sending of which has a meaning known to all the lovers of the country in which this language is used.

CHAPTER FOUR

[*1] That is, in treating of whether (etymologically compound) names are *true*, on the basis of the supposed immediate reference of their elementary component names.—Tr.

[1] It is said that the Arabs have more than a thousand different words for *camel* and more than a hundred for *sword*, etc.

CHAPTER FIVE

[1] Chardin says it is astonishing that two figures can do as much as all our letters. But I see nothing astonishing in this, since the letters of our alphabet, which number twenty-three, are nevertheless composed of only two lines, the straight and the circular. That is, with C and I, one can form all the letters that enter into any of our words.

[2] "These characters are quite beautiful in appearance, not at all confused or barbarous. The letters are said to have been gilded, for there is still some gilt on them, especially the capitals, which still look golden. It is certainly remarkable that the atmosphere has been unable to wear away this gilding in so many centuries. However, it is not remarkable that no scholar has ever understood anything written in this language, since it is in no way like any language known to us. All the systems of writing known today, except Chinese, have many affinities to each other, and appear to derive from the same source. Most remarkable in this connection are the Guebres, the remnants of ancient Persia. For they preserved and perpetuated the religion, still not only are they as unfamiliar with these characters as we, but their own characters resemble them no more than ours do. From this it follows either that it is a cabalist character, which is improbable, since it is the natural and usual character, used throughout the edifice, and since no other is used in the same way; or else it is of such great antiquity that we should hardly dare to speak it." In effect, Chardin has made the assumption in this passage that from the time of Cyrus and the wise men, these characters were already forgotten, as little known as today. [The Rosetta Stone was discovered in 1799, twenty years after Rousseau's death.—Tr.]

[3] I consider the Carthaginians Phoenicians, since Carthage was a colony of Tyre.

[4] See Pausanias, *Arcadia.* The Latins originally wrote in the same way; and from that, according to Marius Victorious, came the word *versus.*

[5] "*Vocales quas graece septem, Romulus sex, usus posterior quinque commemorat, Y velut graeca rejecta.* Mart. Capel., *lib.* iii. ["The Greek language has seven vowels, that of Romulus has six, and later practice notes five, as

‘Y’ is a throwback to Greek.” Martianus Mineus Felix Capella (c. A.D. 400–439), *Satyricon*, Bk. iii.]

[6] Punctuation, which does not have this defect, would be the best of such means if it were more complete. Why, for example, do we not have a vocative mark? The question mark, which we have, would be much less necessary, since a question is recognizable from its structure alone, at least in our language. *Venez vous* and *vous venez* are not the same. But how is one to distinguish, in writing, between a man one mentions and a man one addresses. There really is an equivocation which would be eliminated by a vocative mark. The same equivocation is found in irony, when it is not made manifest by accent.

CHAPTER SIX

[*1] Bk. vi, especially lines 165–75, is the only passage in Homer that suggests knowledge of the art of writing.—Tr.

CHAPTER SEVEN

[1] See note at end of chapter.

[2] M. Duclos, *Remarques sur la grammaire générale raisonnée*, p. 50.

[3] Undoubtedly the Italians distinguish by the same accent, between, for example, the verb è and the conjunction *e;* but the first is also aurally distinguished by a harder, more emphatic sound, which makes it a vocal accent: an observation Buonmattei was wrong in not making.

CHAPTER NINE

[*1] That is, Cain. Abel was a herdsman.—Tr.

[1] I consider primitive the period of time from the dispersion of men to any period of the human race that might be taken as determining an epoch.

[2] Genuine languages are not at all of domestic origin. They can be established only under a more general, more durable agreement. The American savages hardly speak at all except outside their homes. Each keeps silent in his hut, speaking to his family by signs. And these signs are used infrequently, for a savage is less disquieted, less impatient than a European; he has fewer needs and he is careful to meet them himself.

[3] The craft of hunting is not at all favorable to population growth. This was observed when the islands of Santo Domingo and Tortuga were inhabited by buccaneers, and is confirmed by the condition of North America. No known founders of populous nations have been professional hunters. They have all been farmers or shepherds. Thus hunting must be treated here less as a means of subsistence than as an accessory of the pastoral condition.

[4] It is not possible to determine the precise degree of man’s natural indolence. It is said that he lives only to sleep, to vegetate, to rest. Only with difficulty can he resolve to bestir himself enough to avoid dying of starvation. Nothing sustains the love of so many savages for their mode of life as does this delicious indolence. The feelings that make man restless, foresighted, and active arise only in society. To do nothing is the primary and the strongest passion of man after that of self-preservation. If one looks carefully, he will see that, just as among ourselves, it is in order to achieve repose that everyone works. It is laziness that even makes us hard-working.

[5] The names *autochthon* and *aborigine* signify only that the earliest inhabitants of the country were savages, without laws, without traditions, and that the countries were populated before the development of speech.

[6] Fire gives animals great pleasure, just as it does man, once they have become used to the sight of it, and felt its gentle warmth. Often it will prove almost as useful to them as to us, at least for warming their young. Still, no one would say that any beast, wild or domestic, has acquired the skill to make a fire in the same way that we do. Thus these rational beings who are said to have formed a short-lived society before man, still did not reach a

level of intelligence at which they were able to strike a few sparks from a flint to make a fire, or even to preserve whatever random fires they might come across.

[7] See Genesis XXI, for an example of each, between Abraham and Abimilech, concerning the Well of Oath.

[8] It is held that, by a sort of natural action and reaction, various dominant species of animals would perpetually counterbalance each other, which would take the place of equilibrium for them. It is said that when the devouring species became overnumerous at the expense of the devoured, the former would encounter a food short-age which would force them to retrench and allow the others time to replenish their ranks to a point at which they could again provide the others with abundant food, and at which they would start again to diminish, while their devourers would repopulate once again. But such an oscillation does not seem at all likely to me, for in this arrangement there has to be a period in which the species that is preyed upon builds up while the one that feeds on them diminishes, and that seems to me against all reason.

[9] The first men would have had to marry their sisters. In the simplicity of primitive customs, this practice would easily perpetuate itself as long as families remained isolated, and even after the reunion of the most ancient peoples. But the law that prohibits it is no less sacred for its human ordination. Those who see it only in terms of the bond it forms among families, fail to see its most important aspect. Given the intimacy that domestic life is bound to establish between the two sexes, from the moment such a sacred law ceased to appeal to the heart and mind there would be no more integrity among men and the most terrifying practices would soon bring about the destruction of mankind.

CHAPTER ELEVEN

[1] Turkish is a northern tongue.

CHAPTER TWELVE

[1] *Geography*, Bk. I.

[2] "*Archytas atque Aristoxenes etiam subjectam grammaticen musicae putaverunt, et eosdem utriusque rei praeceptores fuisse. . . . Tum Eupolis, apud quem Prodamus et musicen et litteras docet. Et Maricas, qui est Hyperbolus, nihil se ex musicis scire nisi litteras Confitetur.*" Quintillian, Bk. I, ch. 10.

["Archytas and Aristoxenes also considered grammar to be included under music, and the same masters taught both. . . . Then too, Eupolus has Prodamus teaching both music and letters. And Maricas, who is Hyperbolus, admits that he knows nothing of music except letters."]

[3] No doubt allowance must be made for Greek exaggeration in all such matters; but one concedes too much to modern prejudice if one pushes such discounting to the point where all differences vanish. "When Greek music in the time of Amphion and Orpheus had reached the level it has attained today in the remotest provincial cities," says Abbé Terrasson, "it would interrupt the course of rivers, attract oak trees, and move cliffs. Today, having reached a very high degree of perfection, it is very much loved, it is just as pervasively beautiful, but it leaves everything in place. Thus, for example, it includes the verses of Homer, a poet born in the infancy of the human spirit, compared to those who followed. We are enraptured by these verses, but today we are content simply to enjoy and esteem those good poets." Undoubtedly the Abbé Terrasson has had some acquaintance with philosophy, but he does not show it in this passage.

CHAPTER NINETEEN

[1] Relating all harmony to the very simple principle of the reverberation of notes in their aliquots, M. Rameau bases the minor mode and dissonance on his supposed observation that the motion of a sonorous string produces vibrations in other strings, longer than its twelfth and its seventeenth flat major. According to him, the strings vibrate and quiver over their entire length, but do not reverberate. This strikes me as physically unique, as if one said the sun shone but nothing was seen.

The longer strings produce only sharps, because they divide, vibrate, resound in unison, and blend that sound with their own, apparently making no sound. The error is in thinking they vibrate over their entire length, failing to observe the knots carefully. Two sonorous strings forming some harmonic interval can make their fundamental and flat sound heard even without a third string. This is a matter of experience, confirmed by M. Tartini. But a single string has no other fundamental note than its own. It produces no resonance or vibration in its multiples, but only in its unison and its aliquots. As sound has no other cause than the vibration of bodies, and where the cause acts freely the effect always follows, it is absurd to speak of separating vibrations from resonance.

CHAPTER TWENTY

[1] M. Duclos, *Remarques sur la grammaire générale et raisonnée*, P 2.

SECTION ONE

[1] Süssmilch, *Beweis, dass der Ursprung der Menschlichen Sprache Göttlich sey* [*Proof that the Origin of the Language of Man Is Divine*], Berlin, 1766, p. 21.

[2] The best book on this matter, which so far has not been worked out in all its parts, is Wachter's *Naturae et scripturae concordia* [*Concordanc e of Nature and Scripture*], Hafn. 1752, which differs from the dreams of Kircher and numerous others as a history of antiquity differs from fairy tales.

[3] *Lettres sur les aveugles: à l'usage de ceux qui voyent*, etc. [*Letters on the Blind, for the Use of Those Who See*].

[4] *Essai sur l'origine des connoissances humaines* [*Essay on the Origin of Human Knowledge*], Vol. II.

[5] *Sur l'inégalité parmi les hommes*, etc. [*On the Inequality among M en*], Part I.

[6] *Ibid.*

[7] Süssmilch, *Beweis für die Göttlichheit*, etc. [*Proof for the Divinity*], Appendix III, p. 110.

[8] *Traité sur les animaux.*

[9] *Sur l'origine de l'inégalité*, etc.

[10] Reimarus, *Über die Kunsttriebe der Thiere* [*On the Artifactive Drives of Animals*]. See reflections on this in the *Briefe die neueste Litteratur betreffend*, etc. [*Letters Concerning the Most Recent Literature*].

SECTION TWO

[1] A division favored in a recent metaphysical treatise, *Search's Light of nature pursued*, London, 1768.

[2] Rousseau, *On the Inequality*, etc.

[3] One of the most beautiful treatises to illuminate the nature of apperception on the basis of physical experiments (which only rarely serve to elucidate the metaphysics of the soul) is to be found in the publications of the Berlin Academy of 1764.

[4] Süssmilch, *op. cit.*, Section 2.

[5] *Ibid.*, p. 49.

[6] *Ibid.*, p. 48.

[7] From Camper's *Zergliederung des Orang-Outang* [*Analysis of the Orangutan*] (see his translated minor writings), it appears that this assertion was too bold. But at the time when I wrote these lines it was the generally accepted opinion among anatomists.

SECTION THREE